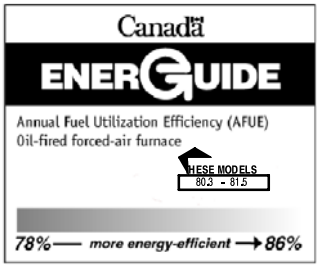
OLR/OLF
Product Specifications

Illustrations and photographs are only representative.
Some product models may vary.

LO-BOY
OIL FURNACE

FEATURES

- **Fan Control Switch** – for continuous fan operation
- **Accessory terminals** – prewired for easy add-on electronic air cleaner and power humidifier. Air conditioning ready for easy add-on
- **Large external front clean out** – for easy cleaning
- **Clean out** – sealed from blower compartment (no soot to spread)
- **Easy Access** – control panel
- **Sight Glass/View Port** – (some models only)
- **Furnaces** – are available with your choice of high efficiency Riello or Beckett burners. (Burners ordered and shipped separately)
- **"Easy Access" heat exchanger** – manufactured from heavy gauge steel
- **Multi-Speed Direct Drive Motors** – permanently lubricated for long life performance
- **Heavy-duty insulated cabinet** – for quiet operation
- **Approved for 1″ clearance to combustibles** – for tight installations
- **Ceramic combustion chamber** – withstands temperature of 2600° F with unique "self aligning" design
- **Precision balanced blower** – ensures quiet, efficient air distribution
- **Raised cabinet base** – allows air to circulate under the cabinet. Eliminates dampness
- **Approved applications** – All Chimney Vent, some Direct Vent with accessories
- **Efficient** – Up to 81.5% AFUE
- **OLR – Rear Flue** configuration
  OLF – Front Flue configuration
- **Warranty** – Limited lifetime heat exchanger, five(5) years on burner and most other parts



LO-BOY OIL FURNACE				
Model Number	**Heat Exchangers ***	**Dimensions H x W x D (in.)**	**Input (BTU/h)**	**Cooling capacity @ .5 in wc**
OLR105A12	Lifetime	32 x 21 x 41	70,000 – 100,800	1.5 – 3 TON
OLF105A12	Lifetime	32 x 21 x 41	70,000 – 100,800	1.5 – 3 TON
OLF140C12	Lifetime	43 x 22¾ x 44	105,000 – 140,000	1.5 – 2.5 TON
OLR160B20	Lifetime	40 x 25 x 49	119,000 – 159,600	1.5 – 3 TON
OLR182A16	Lifetime	43 x 22 x 44¼	140,000 – 182,000	3.5 – 5 TON

* Lifetime Limited Warranty

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Specifications are subject to change without notice.

FURNACE SPECIFICATIONS

Model: OLR	OLR105A12C				OLR160B20C			OLR182A16C				
Rating and Performance												
Firing Rate (USPGH)	.50	.63	.75	.72	.85	.97	1.14	1.00	1.10	1.20	1.25	1.30
Input (BTU/h)	70,000	88,200	105,000	100,800	119,000	135,800	159,600	140,000	154,000	168,000	175,000	182,000
Heating capacity, chimney installation (BTU/h)	59,200	73,000	87,800	NA	99,000	111,000	129,000	112,700	123,970	135,240	140,875	146,510
Heating capacity, side-wall installation (BTU/h)	59,400	73,200	88,200	84,200	97,000	110,000	127,000	NA				
Minimum-maximum Temperature Rise	11° - 24° C / 52° - 75° F				10° - 17° C / 50° - 80° F			13° - 29° C / 55° - 85° F				
Stack draft, (Chimney), (Side-wall)	(-0.035" to -0.06") (+0.04" to +0.16")				(-0.035" to -0.06") (+0.04" to +0.22")			NA				
Overfire pressure, (Chimney),(Side-wall)	(0.00" to +0.035") (+0.10" to +0.25")				(0.00" to +0.04")(+0.10" to +0.25")			NA				
Beckett Burner, Chimney Installation	**AFG-F0 (tube insertion $5^1/_8$")**				**AFG-F3 (tube insertion $6^5/_8$")**			**AFG-F3 (tube insertion $5^3/_{16}$")**				
Low firing rate baffle	Yes	Yes	No	NA	No			Yes				
Static disc. model	$2^3/_4$ #3383			NA	$2^3/_4$ #3383			$2^3/_4$ #3383				
Nozzle (Delavan)	.50-70A		.60-70B	NA	.75-70B	.85-70B	1.00-70B	1.00-70W	1.10-70W	NA	1.25-70W	NA
Pump Pressure (PSIG)	100	156	156	NA	130	130	130	100	100	NA	100	NA
Combustion air adjustment (band/shutter)	0 / 4.5	0 / 8	0 / 7.5	NA	0 / 5	0 / 6.5	0 / 10	2 / 3	2 / 6	NA	6 / 6	NA
Riello Burner, Chimney Installation	**40-F3 (tube insertion $5^3/_{16}$")**				**40-F5 (tube insertion $6^5/_8$")**			**40-F5 (tube insertion $5^1/_4$")**				
Nozzle (Delavan)	NA	.50-60A	.60-60A	NA	.75-70B	.85-70B	1.00-70B	.85-60W	.85-60W	1.00-60W	NA	1.10-60W
Pump Pressure (PSIG)	NA	156	156	NA	130	130	130	140	170	145	NA	140
Combustion air adjustment (turbulator/damper)	NA	0 / 3	0 / 4	NA	1 / 2	1 / 2.5	1 / 3	2.5 / 2.5	3 / 2.75	3 / 3	NA	3.5 / 3.25
Beckett Burner, Side-wall Installation	**AFII-85 (tube insertion $4^{15}/_{16}$")**				**AFII-150 (tube insertion $6^5/_8$")**			**NA**				
Nozzle (Delavan)	.50-60W		.60-60W	NA	.75-70B	.85-70B	1.00-70B	NA				
Pump Pressure (PSIG)	100	156	156	NA	130	130	130	NA				
Combustion air adjustment(screw/dial)	3/1.5	3/3	3/4.5	NA	2.75	4.25	6.75	NA				
Riello Burner, Side-wall Installation	**40-BF3 (tube insertion $5^3/_{16}$")**				**40-BF5 (tube insertion $6^5/_8$")**			**NA**				
Nozzle (Delavan)	NA	.50-60W	NA	.60-60W	.75-70B	.85-70B	1.00-70B	NA				
Pump Pressure (PSIG)	NA	156	NA	145	130	130	130	NA				
Combustion air adjustment (turbulator/damper)	NA	0 / 6	NA	0 / 7.5	1 / 3	1 / 4	2 / 4.5	NA				
Electrical System												
Volts - Hertz - Phase	115-60-1				115-60-1			115-60-1				
Operating voltage range	104 - 132				104 - 132			104 - 132				
Rated voltage Amp	12.2				15.7			16.4				
Minimum ampacity for wiring sizing	13.7				18.1			19.1				
Max. fuse size (Amps.)	15				20			20				
Control transformer	40 VA				40 VA			40 VA				
Ext. control power available, cooling and accessories	30 VA				30 VA			30 VA				
Blower Data												
Motor (HP) / number of speeds	$^1/_3$ HP / 4 speeds				$^3/_4$ HP / 4 speeds			$^3/_4$ HP / 4 speeds				
Blower wheel size (in.)	10 x 10				12 x 10			12 x 9				
Filter quantity and size (in.)	(1) 20 x 20				(2) 16 x 24			(2) 15 x 20				
Weight (Lbs.)	200				235							

BLOWER PERFORMANCE DATA (Air delivery - CFM with air filter)

Model No.	OLR105A12C							OLR160B20C							OLR182A16C	
	External Static Pressure with Air filter															
Speed	**0.1"**	**0.2"**	**0.3"**	**0.4"**	**0.5"**	**0.6"**	**0.7"**	**0.1"**	**0.2"**	**0.3"**	**0.4"**	**0.5"**	**0.6"**	**0.7"**	**0.2"**	**0.4"**
Low	940	880	820	760	700	640	580	1148	1116	1084	1052	1020	988	956	NA	NA
Med-Lo	1054	978	902	826	750	674	598	1366	1362	1358	1354	1350	1346	1342	1725	1600
Med-Hi	1144	1108	1072	1036	1000	964	928	1676	1642	1608	1574	1540	1506	1472	1850	1725
High	1444	1408	1372	1336	1300	1264	1228	2250	2150	2050	1950	1850	1750	1650	1975	1850

Specifications are subject to change without notice.

FURNACE SPECIFICATIONS

Model: OLF	OLF105A12C				OLF140C12C		
Rating and Performance							
Firing Rate (USGPH)	.50	.63	.75	.72	.75	.85	1.00
Input (BTU/h)	70,000	88,200	105,000	100,800	105,000	119,00	140,000
Heating capacity, chimney installation (BTU/h)	59,200	73,000	87,800	NA	84,525	95,795	112,700
Heating capacity, side-wall installation (BTU/h)	59,400	73,200	88,200	84,200	NA		
Minimum-maximum Temperature Rise	11° - 24° C / 52° - 75° F				13° - 29° C / 55° - 85° F		
Stack draft, (Chimney),(Side-wall)	(-0.035" to -0.06") (+0.04" to +0.16")						
Overfire pressure, (Chimney),(Side-wall)	(0.00" to +0.035") (+0.10" to +0.25")						
Beckett Burner, Chimney Installation	**AFG-F0 (tube insertion $6^{5}/_{8}$")**				**AFG-F3 (tube insertion $5^{3}/_{16}$")**		
Low firing rate baffle	Yes	Yes	No	NA	Yes		
Static disc. model	$2^{3}/_{4}$ #3383			NA	$2^{3}/_{4}$ #3383		
Nozzle (Delavan)	0.50-70A		0.60-70B	NA	.75-70W	.85-70W	1.00-70W
Pump Pressure (PSIG)	100	156	156	145	100	100	100
Combustion air adjustment (band/shutter)	0 / 4.5	0 / 8	0 / 7.5	NA	0 / 5	0 / 7	1 / 5
Riello Burner, Chimney Installation	**40-F3 (tube insertion $5^{3}/_{16}$")**				**40-F3 (tube insertion $5^{1}/_{4}$")**		
Nozzle (Delavan)	NA	0.50-60A	0.60-60A	NA	.60-60W	.75-60W	.85-60W
Pump Pressure (PSIG)	100	156	156	145	155	130	140
Combustion air adjustment (turbulator/damper)	NA	0 / 3	0 / 4	NA	1.5 / 2.75	2.5 / 3.25	3 / 4.25
Beckett Burner, Side-wall Installation	**AFII-85 (tube insertion $4^{15}/_{16}$")**				**NA**		
Nozzle (Delavan)	0.50-60W		0.60-60W	NA	NA		
Pump Pressure (PSIG)	100	156	156	145	NA		
Combustion air adjustment (screw/dial)	3 / 1.5	3 / 3	3 / 4.5	NA	NA		
Riello Burner, Side-wall Installation	**40-BF3 (tube insertion $5^{3}/_{16}$")**				**40-BF3**		
Nozzle (Delavan)	NA	0.50-60W	NA	0.60-60W	NA		
Pump Pressure (PSIG)	100	156	156	145	NA		
Combustion air adjustment (turbulator/damper)	NA	0 / 6	NA	0 / 7.5	NA		
Electrical System							
Volts - Hertz - Phase	115-60-1				115-60-1		
Operating voltage range	104 - 132				104 - 132		
Rated voltage Amp	12.2				14.7		
Minimum ampacity for wiring sizing	13.7				16.8		
Max. fuse size (Amps.)	15				20		
Control transformer	40 VA				40 VA		
Ext. control power available, cooling and accessories	30 VA				30 VA		
Blower Data							
Motor (HP) / number of speeds	$^{1}/_{3}$ HP / 4 speeds				$^{1}/_{3}$ HP / 4 speeds		
Blower wheel size (in.)	10 x 10				10 x 10		
Filter quantity and size (in.)	(1) 20 x 20				(1) 10 x 20 & (1) 20 x 20		
Weight (Lbs.)	207						

BLOWER PERFORMANCE DATA (Air delivery - CFM with air filter)

Model No.	OLF105A12C							OLF140C12C	
	External Static Pressure with Air filter								
Speed	**0.1"**	**0.2"**	**0.3"**	**0.4"**	**0.5"**	**0.6"**	**0.7"**	**0.2**	**0.4**
Low	882	854	826	798	770	742	714	NA	NA
Med-Lo	1056	992	928	864	800	736	672	1225	1075
Med-Hi	1092	1064	1036	1008	980	952	924	1450	1275
High	1360	1320	1280	1240	1200	1160	1120	1550	1375

NEW MODEL NUMBER IDENTIFICATION GUIDE

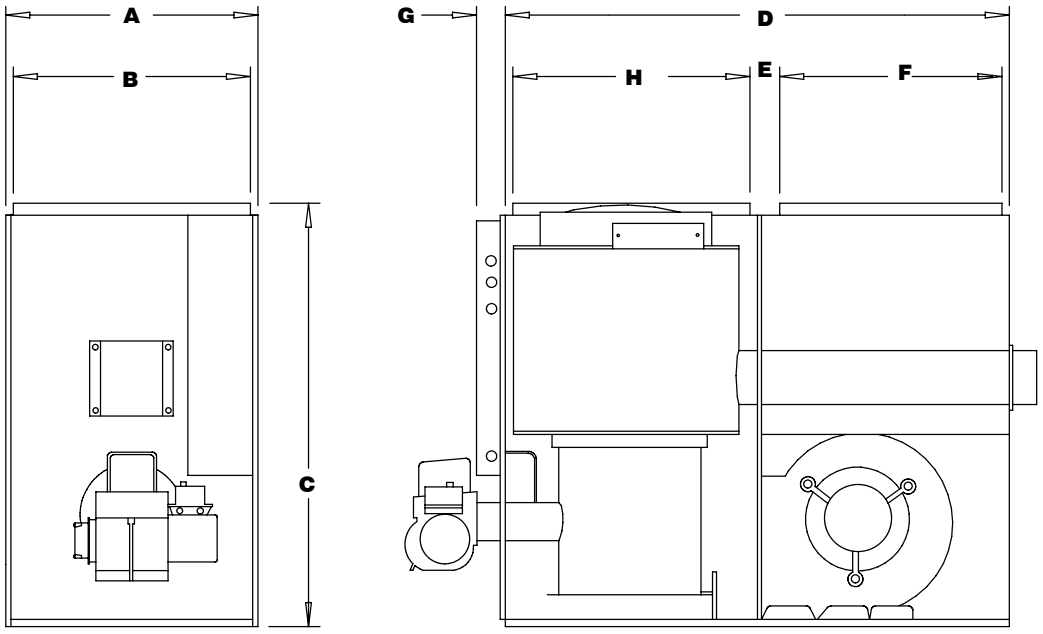
MODEL NUMBER	O	L	R	105	A	12	C
							REVISION
							AIR FLOW
							08 = 800 CFM
							12 = 1200 CFM
							18 = 1800 CFM
							20 = 2000 CFM
							SUPPLY PLENUM SIZE
							A = 20 x 20
							B = 24 x 24
							C = 21.1 x 21.5
							INPUT, MBTUH

FUEL
O = Oil

PRODUCT GROUP
U = Upflow
D = Downflow
H = Horizontal
C = Downflow/Horizontal
T = Upflow/Horizontal
M = Multiposition
L = Lowboy

SERIES
F = Front Breech
R = Rear Breech

DIMENSIONS



Representative only, some models may vary in appearance. **27–11–22**
ALL DIMENSIONS IN INCHES (1 INCH = 25.4 MM)

Furnace Dimensions

Model No.	A	B	C	D	E	F	G	H
OLR105A12	21	19 3/4	32	41	2	17 3/4	2.4	19 3/4
OLF105A12	21	19 3/4	32	41	2	17 3/4	2.4	19 3/4
OLF140C12	22 3/4	21 1/2	43	44	1 1/2	17	2.4	21 1/8
OLR160B20	25	23 3/4	40	49	2 1/8	21 3/4	2.4	23 3/4
OLR182A16	22	20	43	44 1/4	1 1/4	20	2.4	20

Minimum Installation Clearances from Combustible Materials

Application		OLR105 OLF105	OLR160
Sides	Furnace	1″ (25.4 mm)	1″ (25.4 mm)
	Supply plenum, warm air duct within 6 ′ of furnace	1″ (25.4 mm)	1″ (25.4 mm)
Back	Furnace	1″ (25.4 mm)	18″ (457.2 mm)
Top	Furnace casing or plenum	1″ (25.4 mm)	2″ (50.8 mm)
Bottom	Furnace - combustible floor	0″	0″
Front	Furnace	24″ (609.6 mm)	24″ (609.6 mm)

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ACCESSORIES

Product Model No.	Burners	Nozzle (not supplied)	Direct Vent Terminal	Direct Vent Pipe	Coil Adapter	Accessories Vestibule Kit
OLF105A12	N01J040 (Beckett-chimney)	(0.50 - 70A) - N03F015	--	--	OCA20	LBVEST1
		0.60-70B - N03H014	--	--		
	N01F032 (Riello-chimney)	(0.50 - 60A) - N03F014	--	--		
		0.60-60A - N03F017	--	--		
	N01J038 (Beckett-direct vent)	(0.50 - 60W) - N03G010	VTK1 5″	IFV315 or IFV323 or IFV330		
		0.60 - 60W - N03G011				
	N01F034 (Riello-direct vent)	(0.50 - 60W) - N03G010				
		0.60 - 60W - N03G011				
OLF140C12	N01J042 (Beckett-chimney)	(0.75 - 70W) - N03G019	--	--	NA	NA
		(0.85-70W - N03G016	--	--		
		(1.0-70W - N03G012	--	--		
	N01F038 (Riello-chimney)	0.60 - 60W - N03G011	--	--		
		(0.75 - 60W) - N03G021	--	--		
		(0.85 - 60W) - N03G022	--	--		
OLR105A12	N01J040 (Beckett-chimney)	(0.50 - 70A) -N03F015	--	--	OCA20	LBVEST1
		0.60-70B - N03H014	--	--		
	N01F032 (Riello-chimney)	(0.50 - 60A) - N03F014	--	--		
		0.60-60A - N03F017	--	--		
	N01J038 (Beckett-direct vent)	(0.50 - 60W) - N03G010	VTK1 5″	IFV315 or IFV323 or IFV330		
		0.60 - 60W - N03G011				
	N01F034 (Riello-direct vent)	(0.50 - 60W) - N03G010				
		0.60 - 60W - N03G011				
OLR160B20	N01J039 (Beckett-chimney)	(0.75 - 70B) - N03F024	--	--	OCA24	LBVEST2
		1.00-70B - N03H001	--	--		
	N01F033 (Riello-chimney)	(0.75 - 70B) - N03F024	--	--		
		(0.85-70B) - N03H008	--	--		
		1.00-70B - N03H001	--	--		
	N01J041 (Beckett-direct vent)	(0.75 - 70B) - N03F024	VTK2 6″	IFV415 or IFV423 or IFV430		
		(0.85 - 70B) - N03H008				
		1.00 - 70B - N03H001				
	N01F035 (Riello-direct vent)	(0.75 - 70B) - N03F024				
		(0.85 - 70B) - N03H008				
		1.00 - 70B - N03H001				
OLR182A16	N01J043 (Beckett-chimney)	(1.00 - 70W) - N03G012	--	--	OCA24	NA
		1.10-70W - N03G013	--	--		
		1.25-70W - N03G024	--	--		
	N01F039 (Riello-chimney)	(0.85 - 60W) - N03G022	--	--		
		1.10-60W - N03G013	--	--		

ADDITIONAL ACCESSORIES

Accessories Model No	Description	Use With
CAS2B	Outside Air Intake Kit, Beckett Direct Vent Burners	ALL Models
CAD1	Flexable Air Duct - 25′ Class 1 for CAS2B	ALL Models
C7001025	Riello Two-pipe Change over Kit	ALL Models
Q034	Mounting Bracket Kit for Filters	ALL Models
Q035	Mounting Mounting Restriction Gauge	ALL Models
Z08F001	7 Micron Media Filter and Head	ALL Models
Z08F004	7 Micron Media Filter Replacement	ALL Models

ACCESSORY DESCRIPTION

Accessories Model No	Description
BURNER	
N01J040	Beckett AFG-F0 Oil Burner for 5″ Breech Models (Chimney Vent)
N01F032	Riello 40-F3 Oil Burner for 5″ Breech Models (Chimney Vent)
N01J038	Beckett AFII-85 Oil Burner for 5″ Breech Models (Direct Vent)
N01F034	Riello 40-BF3 Oil Burner for 5″ Breech Models (Direct Vent)
N01J039	Beckett AFG-F6 Oil Burner for 6″ Breech Models (Chimney Vent)
N01F033	Riello 40-F5 Oil Burner for 6″ Breech Models (Chimney Vent)
N01J041	Beckett AFII-150 Oil Burner for 6″ Breech Models (Direct Vent)
N01F035	Riello 40-BF5 Oil Burner for 6″ Breech Models (Direct Vent)
N01J042	Beckett AFG-F3 Oil Burner (chimney venting) -(shipped with N03G012 & 016)
N01F038	Riello 40-F3 Oil Burner (chimney venting)
N01J043	Beckett AFG-F3 Oil Burner (chimney venting) -(shipped with N03G024)
N01F039	Riello 40-F5 Oil Burner (chimney venting)
VENT TERMINAL	
VTK1	Vent Terminal Kit for 5″ Breech Models
VTK2	Vent Terminal Kit for 6″ Breech Models
FLEX VENT	
IFV315	15′ x 3″ Insulated Flex Vent for 5″ Breech Models
IFV323	23′ x 3″ Insulated Flex Vent for 5″ Breech Models
IFV330	30′ x 3″ Insulated Flex Vent for 5″ Breech Models
IFV415	15′ x 4″ Insulated Flex Vent for 6″ Breech Models
IFV423	23′ x 4″ Insulated Flex Vent for 6″ Breech Models
IFV430	30′ x 4″ Insulated Flex Vent for 6″ Breech Models
VESTIBULE KIT	
LBVEST1	Vestibule Kit for 5″ Breech Low Boy Models
LBVEST2	Vestibule Kit for 6″ Breech Low Boy Models
CASED COIL	
OCA20	Cased Coil Adapter 20″ x 20″
OCA24	Cased Coil Adapter 20″ x 24″
NOZZLE	
N03F014	Nozzle, Oil Burner, Delavan, 0.5 GPH/60°A
N03F017	Nozzle, Oil Burner, Delavan, 0.6 GPH/60°A
N03F015	Nozzle, Oil Burner, Delavan, 0.5 GPH/70° A
N03H014	Nozzle, Oil Burner, Delavan, 0.6 GPH/70° B
N03F024	Nozzle, Oil Burner, Delavan, 0.75 GPH/70° A
N03H008	Nozzle, Oil Burner, Delavan, 0.85 GPH/70° B
N03H001	Nozzle, Oil Burner, Delavan, 1.0 GPH/70° B
N03G010	Nozzle, Oil Burner, Delavan, 0.5 GPH/60° W
N03G011	Nozzle, Oil Burner, Delavan, 0.6 GPH/60° W
N03G021	Nozzle, Oil Burner, Delavan, 0.75 GPH/60° W
N03G022	Nozzle, Oil Burner, Delavan, 0.85 GPH/60° W
N03G019	Nozzle, Oil Burner, Delavan, 0.75 GPH/70° W
N03G016	Nozzle, Oil Burner, Delavan, 0.85 GPH/70° W
N03G012	Nozzle, Oil Burner, Delavan, 1.00 GPH/70° W
N03G013	Nozzle, Oil Burner, Delavan, 1.10 GPH/70° W
N03G024	Nozzle, Oil Burner, Delavan, 1.25 GPH/70° W